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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,247	11/14/2003	Kunihiko Miyagi	12088.012001	2473
7590 Jonathan P. Osha Rosenthal & Osha L.L.P. Suite 2800 1221 McKinney St. Houston, TX 77010		04/25/2007		
			EXAMINER SENGI, BEHROOZ M	
			ART UNIT 2621	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/25/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/714,247

Applicant(s)

MIYAGI ET AL.

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/14/2004, 7/14/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because; the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. Correction is required. See MPEP § 608.01(b).

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunakawa Makoto (Pub No. 2000-342529) in view of Kimura et al (US 4,816,909).

Regarding claim 1, Makoto teaches, a system which projects a vibrating object onto an image projecting means for observation (i.e. fig. 1), the system comprising: an image pickup section for picking up an image of the object at a constant cycle (i.e. fig. 1, CCD 31); a frequency detecting section for detecting the frequency of the vibration (i.e. page 2, paragraph 0010, lines 1 – 4); a trigger output section for outputting a trigger signal at a frequency obtained by the detected frequency (i.e. page 2, paragraph 0010, page 3, paragraph 0016) and a video image making section capable of outputting to the image projecting means only an image picked up by the image pickup section immediately after each trigger signal is outputted (i.e. fig. 1).

Makoto is silent in regards to explicit of, a frequency dividing ratio setting section for variably setting a frequency dividing ratio with respect to the detected frequency.

Kimura in the same field (i.e. col. 5, lines 25 – 32) teaches, a frequency dividing ratio setting section for variably setting a frequency-dividing ratio with respect to the detected frequency.

In view of the above, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the endoscope device of Makoto in accordance with the teaching of Kimura by incorporating a frequency dividing ratio setting section to improve the video endoscope system which can respond to different types of imaging, as suggested by Kimura (col. 1, lines 7 – 10).

Regarding claim 2, Makoto teaches, wherein manually adjusting the frequency (page 5, panel switch, paragraph 0033, lines 2 – 4, and also fig. 9, sw switch of Kimura).

Regarding claim 3, Kimura teaches, wherein the frequency dividing ratio-setting section has a frequency dividing ratio automatic setting function for automatically setting a frequency-dividing ratio (i.e. col. 5, lines 25 – 32).

Regarding claim 4, Makoto teaches, wherein the video image making section includes: an image storage section for receiving for storage therein an image for one field from the image pickup section so as to output the image to the image projecting means; and an image storage control section for controlling the storing operation of the image storage section (i.e. page 2, paragraph 0010, lines 17 – 19).

Regarding claim 5, Makoto teaches, wherein the image pickup section includes an endoscope which can be inserted into a larynx of a person to be inspected so that an image of a vocal cord of the person can be obtained (i.e. fig. 1, endoscope 21); the frequency detecting section includes a voice collecting section for collecting a voice generated by the person, and an extracting section for extracting a basic frequency of the collected voice as the vibrating frequency to be detected (i.e. fig. 1, voice collecting 4); thereby the vibrating object observing system is provided as a vocal cord observing system in which a vocal cord serves as an object to be observed (i.e. page 2, paragraph 0010).

Regarding claim 6, Makoto teaches, a housing in which the extracting section, the trigger output section, the video image making section, a connecting terminal connected directly or indirectly to the endoscope, a connecting terminal connected to the image projecting means, and a connecting terminal connected to the voice

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collecting section are mounted, reads on (fig. 1, where all component are connected within the housing).

Contact

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(571) 272-7339**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mehrdad Dastouri** can be reached on **(571) 272-7418**.

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, Va. 22314.

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is **(571) 272-6000**,

Or faxed to:


(571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B.M.S.



TUNG VO
PRIMARY EXAMINER